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TEACHING TACTICS

A NEW APPROACH

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STUDENT ESSAY

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TEACHING TACTICS: A NEW APPROACH

BY

COLONEL CLYDE J. TATE

INFANTRY

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CORRESPONDING COURSE

US ARMY WAR COLLEGE, CARLISLE BARRACKS, PENNSYLVANIA



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Colonel Clyde J. Tate
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US Army War College
Carlisle Barracks, Pennsylvania
15 October 1975

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Item 20 continued.

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ABSTRACT

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This essay is a review of the various methods of teaching tactics at the Command and General Staff College. Peacetime learning and its objective of training for war are examined. In making this review it is found that the current methods of teaching tactics incorporate many techniques and procedures used prior to World War II. The revitalized teaching procedures, within the framework of a modern, dynamic battlefield have meaningful application as tactics is made the imaginative, challenging and interesting art that it is. It appears that possibly there is nothing new in our methods of teaching tactics; however there is an increased awareness of new approaches to teaching that require the student to think.

INTRODUCTION

The purpose of this paper is to examine the past and present techniques and methods used at the Command and General Staff College to teach tactics. It is hoped that this essay will stimulate all professional officers to gain an appreciation for the complexities of the art of tactics and how this subject might be taught.

In researching this subject it became apparent that little has been written about how to teach tactics. There is an abundance of material available about methods of instruction, and how to prepare and conduct military training; but to isolate the teaching of tactics, especially in a service school, and describe teaching methods and techniques little has been written. Possibly an acceptable definition or at least an agreeable definition of tactics has eluded many of our teachers. In asking a group of fifty or less officers of field grade rank, "What is your definition of tactics?" a myriad of responses can be expected: "it's fighting," "it's moving your forces across the terrain," "it's organization," "it's knowing where the enemy is located;" the responses could go on and on.

The greek word taxis signified, in a general sense, ORDER, that is to say, the order pertaining to the methodical and systematic disposition of troops on the field of battle. Since the Greeks are popularly supposed to have been the originators of the art of war, so far as historical records go many readers accept this as a start¹ point for defining tactics.¹

However, it does not explain what the "order" refers to; it serves a limited purpose on the modern battlefield of today.

In Tactics for Beginners, Major C. M. De Gruyther, P.S.C., an instructor at the Royal Military College, Camberley defined tactics as "The art of using troops on the field of battle."² Having that straightforward objectivity and ability to "get right to the point," as is characteristic of most British authors, Major De Gruyther has further simplified our problem of defining tactics. He even considers this subject as an art. Additionally, he defines strategy as the "art of using troops in the theatre of war"³ producing a distinction between tactics and strategy, or different levels from which war is viewed.

As we approach contemporary times, our search for a definition of tactics leads to the Dictionary of United States Army Terms: "The employment of units in combat. The ordered arrangement and maneuver of units in relation to each other/or to the enemy in order to use their full potentialities."⁴ This two part definition tends to possess redundancy, because if you arrange your forces in relation to an enemy - you obviously are in combat. The definition does include order, arrangement, and very important, the need to use the full potential of these forces. For the purpose of this paper the following definition seems appropriate and is used: The art of arranging and maneuvering units in relationship to each other and to the enemy in order to use their full potential.

Having established a definition for tactics it is useful to explain why the subject is of importance to the professional soldier. Recognizing the merits of the recently established Officer Personnel Management System (OPMS) and the increased interest in specialization being on a par with generalization, there is a school of thought that tactics is simple; that tactics is not a problem; or that tactics is not a subject worthy of study; or that tactics is for the squad, platoon or company level. Certainly, tactics is not a subject for continued study, research or self-enrichment. A word of caution to all officers is the need to remain proficient in their primary branch.

However high may be the duties which come to us in the fields of education, instruction, staff, administration or scientific investigation, at sometime we will be called upon to enter the activity of our primary calling, that of commanding troops and more especially command in the presence of the enemy. It must be the aim of every officer to become at sometime a commander, a responsible leader of men.⁵

Tactics is an art to be learned. There are few of us today who will maneuver large armies, establish national policy or balance the national budget; but many, many of us have and will apply tactics. We must concentrate our every effort toward mastering the art of tactics in peacetime so that our indecision on the battlefield will not be paid for in blood.

PEACETIME LEARNING AND TRAINING FOR WAR

The word doctrine has been synonymous with service school teaching of tactics for many years and like tactics its definition has eluded many students. To violate doctrine was to commit a most serious sin. What is doctrine? Is doctrine that which normally works best, authoritative in nature, based on study and experience; or is doctrine what most of us believe is right? When does doctrine become dogma? Who determines that it's doctrine? Few students have ever asked these questions or challenged doctrine in the past. Doctrine has its place in the college classroom--a place that needs constant examination. Weapons of war have changed, mobility has increased, the very nature of war changes with each advance in technology; but in many cases we still use or teach doctrine that is accepted without question. For the purpose of this paper let's accept the contemporary definition of doctrine as: "fundamental principle by which the military forces or elements thereof guide their actions in support of national objectives. It is authoritative but requires judgement in application."⁶

A careful analysis of the above definition is necessary. Doctrine should help us guide, not direct, our actions. It requires judgment in its application. "Who's judgment?" you may ask. Is it the judgment of the tactician or student who is applying it? Judgment is based on sound reasoning and

experience. Doctrine is a start point or base line from which our actions or decisions originate. Therefore, the student of tactics must be required to think, to rationalize, to gain insight, to read, and above all to put his thoughts to work.

We must think of doctrine not dogma.

It is very easy to accept dogma and to dilate upon it and dress it in modern uniform when one views the battle from an armchair in a training headquarters /or academic environment/ or when one reaches the comfortable state of believing that because certain ideas have worked in the past, it is not necessary to ask whether they can be improved upon.⁷

To be effective in our tactical training we must cause the student to think and to gain insight into a problem.

A generally acceptable definition of insight is difficult to give as it has been so variously used and defined. Some of the characteristic statements of its meaning will be helpful. Instead of an understood solution arising first by chance and then being understood, a rapid grasping of relations necessary to a solution without a step-by-step dependence on trial and error occurs before the solution is reached.⁸

The student of tactics must retain certain facts and figures concerning his profession, in order to completely master the art of tactics. Facts concerning the detail organization of his units, such as their limitations/ capabilities must be committed to memory; these same facts concerning his enemy and are vitally essential. Organization, weapons capabilities, ranges, rates of fire, numbers available must be memorized before a tactician can employ his forces in

a situation. We have to examine, evaluate and provide for time in our educational programs to assure ourselves and the students that this type of detailed information is planted firmly in the student's mind. Once this step is completed a degree of confidence has been established, a confidence that will increase the desire for analysis as the student enters subsequent tactical scenarios. The learning retention curve will increase as the student applies these basic facts in his future classes. It is important to remember that organizations, weapons and enemy forces change; therefore, a program to "keep abreast" of the latest information is essential to keeping up with the state-of-the-art.

Beyond knowing the organization of both enemy and friendly forces, the student must become keenly aware of the terrain over which his battle will be fought. Aside from a few basic rules, this awareness will come on through repeated exercises and considerable practice. "If he is unable to "read" the land his lot will inevitably be one of blunder, defeat and disaster. The commander who reads and heeds what the ground has to say is laying foundation for tactical success."⁹ The commander who uses the terrain to cover his movement and locate possible enemy positions and conceal his location, will do much to insure the success of his unit and more importantly to reduce losses.

Terrain appreciation cannot be taught by rules, matrixes or laundry lists. To learn terrain we must change human

behavior. Therefore, changing behavior must be the aim of any course in terrain appreciation. This is more important than merely reciting: cover and concealment, observation and fire, obstacles, key terrain, avenues of approach or the familiar COOKA. This does not mean that rules are not important, but it does mean that once the rules become known the student must learn, through changed behavior, how to apply them. Past training programs failed because human nature taught us that knowledge is learned facts. Instead of applying the facts, we spend excessive time learning new facts and never use them. A good program on terrain appreciation will result when we combine knowledge (rules), attitude (motivation) and skill (apply the rules) to the process of training. "Keeping a balance among all three of these factors is extremely important."¹⁰

Once a student acquires the facts and knows how to use the terrain, a final step in the teaching of tactics will be to determine how and when to decide. The decision-making process has been in our service schools since "day one," but seldom has anyone faced the student with a situation whereby no decision is required. A commander on the battlefield confronted with an emergency or special situation may be wise to hold his decision, minutes or seconds, for additional information. We want the student to acquire the ability to think logically and determine when timely decisions should be made.

Some officers seem to arrive at the correct solution of tactical problems almost by intuition; but if the workings of their mind could be analyzed, we would find that the quick decisions came from a keen, alert mind, highly trained by study and work and not through any great gift of genius.¹¹

The mind must be trained to sort out the many variables of the battlefield, to discard the nonessential and then to analyze the essentials to determine their outcome on the battle. To reach a correct and workable decision is essential to command. As stated previously "indecision will be paid for in bloodshed."¹² "The power of decision and action which is able to cope with all situations of war is gained only by developing the ability to form a judgment in tactical matters with certainty."¹³

To decide requires the ability to think. It is imperative that we train in peacetime in such a manner that our officers are required to think. Rules are helpful, as a start point, but no two situations are the same. Manuals can be and should be read to learn by heart the organization, weapons effects and the enemy; but beyond that point, think and then decide.

In 1918, instructions for commanders going to Europe with the American Expeditionary Forces contained the following:

These instructions conform to the organization of the American Company. They are published for the information and guidance of the American Expeditionary Forces. The deployments (formations) shown herein are suggestions only. They will not be considered as normal formations to be used in all circumstances. The formation adopted in a particular situation will be such as best meet the requirements of that situation.¹⁴

The message passed to combat leaders seems reasonably clear that: here is an approach - don't expect it to work in every situation; this is "food for thought" etc. Over the years, it seems, at least to this author, that many officers have forgotten how to think. Our peacetime training has not prepared them to think on their own. The desire to excel while in a service school, to pass the examinations with high grades, and to graduate at the top of the class, are all worthy and honorable goals, but fall short of training an officer who knows how to think.

When war comes the officers work with ideas which have been supplied to them; the natural intelligence which they had as a boy having long ago been replaced by the authorized code of thought. If the enemy is led by men who still do their thinking for themselves, he naturally has a tremendous advantage.¹⁵

The success of the Prussian Army officer has frequently been attributed to his ability to think; to his common sense and to his dependence more on intelligence rather than on memory. This is the capability that we must exercise to its fullest in our service school and especially in the "senior tactical school of the Army."

In summary our peacetime training for war must stress doctrine not dogma, develop insight in our students, insure by examination that those undeniable facts of organization (friendly and enemy), weapons capabilities and terrain appreciation are fully understood. The student must be

in an environment that encourages him to think, decide, and master the art of tactics. Beyond the knowledge stage, the learning process must be directed toward changing human behavior. A balance of knowledge, motivation and application must occur.

How well we have been doing the above, as perceived by a student and a faculty member, will be the topics of the next two sections of this paper.

THE "OLD" COLLEGE METHOD OF INSTRUCTION

(The Perceptions of a Student)

The lecture/conference method of instruction has been the predominant technique used at the Command and General Staff College for a number of years. This method proved very satisfactory when the mass production of qualified officers to fill key command and staff positions was necessary. From the early 1940's, and including the 1946 class, tactics was taught by lecture/conference with some practical exercises being used.

Lectures were especially effective in establishing a base line or start point. Rules, facts and items, such as sequence of staff actions are usually well put forth by a lecture; however, the opportunity to reflect or be challenged on a solution was lacking. "It is imperative that students be given time to complete the solution to each problem and that an analysis of their solution be made, if efficient instruction is to be achieved."¹⁶ The lecture does not provide this opportunity.

Ideas and views are seldom brought into conflict using the lecture method. Since war is, in itself, a conflict between two or more parties the lecture method of instruction is the least desirable method for teaching tactics, beyond the basic rules required to be put to memory.

Although class size has varied over the past thirty years, generally lectures presented a 1 on 50 situation. The odds of a student being called on to actively participate favored that he would not be challenged or his ideas put in conflict. Frequently, lectures were followed by the familiar, at least to those who graduated since 1960, "Issue the next requirement" and after a few minutes of speed reading one, possibly two, students would present his or her solution followed by "the school solution." Many students found this far from being an intellectual challenge; most did not even do their homework, since the chance of being called on in the lecture environment was remote. In the beginning of each academic year the desire and enthusiasm of the student was evident in every class, until some lecturer began to repeat the homework. This was not accepted as the redundancy needed to reinforce the teaching objectives, but was viewed as "why do the homework, it will be covered in class tomorrow." Soon the enthusiasm and desire turned into complete boredom.

The tactics curriculum was designed to teach every student, regardless of branch, to be a G-3 at division or corps level. This represented a full 10 months of devoted study in a field

in which one was not likely to be utilized. Ever see an Adjutant General officer as the division G-3? Not likely. Ever see a doctor as the division commander? Again, not likely. This type of curriculum tended to lose a large number of the students early in the year. Essentially the tactic's curriculum did not meet their needs. Organization of the Army in the field, estimate of the situation, offensive and defensive tactics and special operations were some of the many lessons taught in the College, but all of these lacked reality in relation to what units in the field looked like. Tactics and techniques stressed in the classroom were strange and too frequently were reinforced by "this is doctrine." The college is not in touch with the "real world" was often the cry of the frustrated student. The driving force behind the tactics lessons was the single evaluation system, an examination taken by all; regardless of its good intentions, this attracted cliches, key words, and too frequently the same "magic words" heard previously from the platform instructor. No thinking required, just remember the key phrases.

Remember the aggressor instruction? No resemblance to the potential enemies of the United States. We used FM 30-102 and FM 30-103 manuals with their list of strange sounding equipment TABU Tank, Thorn Tank and did you ever figure out where and what the second echelon defense belts were? After learning the aggressor organization, his offensive

and defensive tactics and the order of battle, it was only during the map maneuver that you were given a chance to see how you could do as an enemy commander against a friendly force; a very small exposure to such an important person--the enemy. Seldom is the student required to select exact routes, determine time distance factors or details as to how and when the enemy might attack. Generally we gave the enemy "lip service" and planned to crush him with our superior strength and unimaginative tactics - "two up and one back."

History has provided us with many outstanding examples of battles, but seldom did we find these in the tactics instruction.

Tactics and techniques based on the lethality of the battlefield change but one thing that never changes in human nature. The most important thing in tactics the man behind the gun, never alters; in his heart and feelings, his strength and weakness, he is always much the same.¹⁷

The integration of historical examples which support teaching objectives could have contributed immensely to the learning process. Graduates of the military academies and to a lesser degree graduates of the reserve officer training corps, have had some exposure to military history and especially to the techniques of analysis used in the examination of previous combat actions. But the majority of our officers corps need this exposure to sharpen their minds, encourage them to think objectively instead of accepting the assertions. The wisdom found in historical examples should be pondered on and retained.

The perception of a student taught tactics could be summarized in one word - frustration. There were maximum lectures, minimum practical exercises, a fictitious and unreal enemy, an organization base that was difficult to equate to (we always were at 100% strength and no shortages of equipment while the enemy was on the run). The principal objectives of the majority of the students was to learn the key words, pass the examinations and "get back to the real world."

TACTICS INSTRUCTION AS VIEWED FROM THE EYES OF A

NEW FACULTY MEMBER

The views expressed in this section are a combination of views received from several faculty members, who within the last five years have been assigned to the Command and General Staff College.

Upon arriving at the College after twenty plus years of military service, which included command of a battalion in combat and several key staff positions at division and brigade level, our "hero" is ready to share his experiences both good and bad hoping to save some young officer from making the same mistakes; but his experiences are unwanted or at best warmly received. His problem is that he doesn't know the "doctrine." He must study and commit to memory the readings in this FM or that FM and several TM's. Lectures must be

rehearsed, need to stay within twenty minutes of the lesson plan, you have to learn all those new organizations-- "no not the ones in the field"-- those used in the school. The estimate of the situation, sequence of command and staff actions and the operations order were great, as long as you knew where you were in the sequence. "It's in the book, it's doctrine, it's logical or that's the way to do it. Don't forget, "we want the student to think, as long as he comes up with our answer it's OK," were common phrases among some, but not all (thank goodness) instructors.

Tactical instruction appeared to limit itself to maneuver units and fire support units. Logistics, personnel and command/control were included only as a sidelight or not at all. Relative combat power was primarily the ratio of battalions opposing each other. It was easy to pass questions concerning logistics or higher units to another department or just not answer them. It was amazing how this approach, when tactfully used, was accepted by the majority of the students. The sequence of command and staff actions, estimate of the situation, aggressor forces, logistics, and corps level operations were all subjects taught by other departments.

It was easy to see why things were not always in agreement or perceived as being at variance with each other. When and where does the tactician, especially the commander, get to put it all together? All of the variables which impact on the situation were never brought to bear on the commander.

Too infrequently in the classroom, was the student given a chance to "grapple" with the small important details that can make the difference between winning or losing a battle: time - how long will it take to move this unit; what routes will they take to the assembly area; how many vehicles in this unit; was a warning order issued, etc. Like previous years, a single curriculum for everyone and the same type of examinations at the end. Remember the key words and know how to write the different advantages and disadvantages to a course of action. Repeat the rules, use the rules and stay "close to the school solution."

Yes, the school was still teaching mainly by lecture, but with an increase in practical exercises. Seldom have time for everyone's solution but "go home compare yours with ours" and "issue the next requirement." It's still teaching everyone to be a Division or Corps Commander, which seems a little out of phase, since we have so many Captains and Majors in the class.

It appears, to the newly assigned faculty member, that detail written operations orders, knowing the estimate of the situation and the sequence of command and staff actions are the cornerstones of tactics. The enemy is still the aggressor, organized with "fabu" and "Thorn" tanks and taught by another department. Stacks of issue material were passed to the student, that more often than not, ended up in the waste can. Lesson summaries were retained in order to study for the examination.

We fought in Kansas, Texas, Poland, Germany, Vietnam, Alaska, South American and Korea using every possible scenario imaginable, with each one a detail terrain analysis, varied scale of maps and a new general and special situation. Not many "realistic" real world situations were used during the curriculum.

As we sat in the classroom with our students, too many of us, we were not utilizing to the maximum extend the experience or capacity of the student body, a waste of manpower that needed to be exercised. The student listened intently to his instructor, because he knew that come evaluation time, he was going to be required to "feedback" those "magic words" of the tactician. Yes, we certainly did a great job thinking for the student, but his own intellect was seldom challenged during the year. Rules and rote memory replaced the requirement to think.

Total time spent out of the classroom on such worthy tactical exercises as a terrain walk was zero. A terrain walk, or at least a terrain ride, is one of the most valuable teaching vehicles in existence. "These excursions should give officers an opportunity to employ their intelligence in the performance of the duties in war of their own and the next higher grade."¹⁸

Apparently the requirements to think absolved any thoughts about terrain walks. Possibly this has become another of the

lost arts of teaching tactics. LTC William H. Waldron, in his introduction to Tactical Walks, a book written in 1918, had this to say about tactical walks:

The tactical walk is the best method that has been devised for instructing officers and noncommissioned officers in the subject of minor tactics. Tactical situations are presented to them for practical solutions on the ground itself, and the lessons are firmly impressed on their minds.¹⁹

It's amazing how we must continually remind ourselves that many things done in the past have worthy application on today's training fields, and if expertly utilized can prepare us for war.

TEACHING TACTICS TODAY AT THE COMMAND AND GENERAL

STAFF COLLEGE

The objectives of the Command and General Staff College curriculum is to enable the student upon graduation to:

Train his unit to accomplish its deployed mission; conduct combined arms tactical operations, participate in the evolution of tactical doctrine within the context of national strategy; manage Army resources (men, material, dollars, and time) through the application of sound management principles, policies, and practices; prepare staff actions and research which formulate and conceptualize viable alternatives for problems confronting the military decision makers; expand his knowledge of military forces and their environment, capabilities and limitations, and the strategy that governs their use; and to broaden his role as a military officer tasked with the assessment and employment of military power; and develop a stimulated imaginative attitude toward his future and that of the Army.²⁰

A very careful analysis of the above objectives reveals why this institution has been able to revitalize its reputation of "The Army Senior Tactical School." Tactics comprise the majority of the instructional hours available, and still everyone is not expected to be a tactical commander or division operations officer after graduation. Through careful structuring, a curriculum has been designed that includes a common group of subjects for all officers. This consists of the basic fundamentals and also especially designed electives, which support each student's OPMS specialty.

An analysis of the current student enrollment reveals that 58% are members of the combat arms, 99% are college graduates, 49% have masters degrees of various types and that the majority are in their 11th year of service. A most impressive group of young men and women who need to be challenged by an exciting and imaginative tactics curriculum. This is not a simple task even for the professional educators.

The education of the tactician demands, in addition to this military history/ a productive activity, in the exercise of which he is confronted by questions still unsolved, which he himself must solve. * * * That power of decision and action which is able to cope with all the situations of war is gained only by developing the ability to form a judgment in tactical matters with certainty.²¹

It is not a simple task to teach tactics, even for the most experienced officer; but his chances of success are greatly increased if he remembers some basic facts about the nature of learning.

Most psychologists and teachers think of learning as changed behavior. This practical definition serves to distinguish the process of learning from the act of memorizing rote.²²

In teaching tactics it is important that certain data be retained for immediate recall; i.e. ranges of weapons, capabilities of aircraft etc, but it is not necessary or meaningful for the student to memorize "laundry lists" or rules that can be applied to every tactical situation. There will not be an instant on the battlefield when the commander will face an identical set of circumstances day from day or even hour for hour. There is no place on the battlefield for rules or laundry lists.

The teaching environment will become a critical element of the process leading to an astute tactician. Since we want the tactician to think and be able to rationalize his decision making process, he should be placed in an environment where his ideas are put in conflict with others, because it is through this exchange with his peers that he will learn the most. His work area should be of sufficient size to post maps, hang pencils, attach overlays and messages. He must be totally immersed into the material and paraphernalia common to his profession. The noise level between his work group and others must be at the lowest possible point to preclude distractions. When working in a group, all tables, chairs and map boards must be arranged so that traffic can flow easily, in and around the work area. The instructor-student ratio should not exceed

1:14. This allows sufficient time for the instructor to make his presence known and provide guidance to the searching and seeking students.

The wall space in the classroom and the hallways should be fully utilized to display maps, organization charts, weapons, vehicle pictures and combat photography that serve as a reminder to those who lose sight of the primary purpose for which he is being trained. Tape recorders and television sets should be used to add another dimension to the classroom environment.

Scenarios and individual tactical exercises within those scenarios must be as "real" as possible. Forces used must be similar to those that are in existence, units strengths must be actual or near actual figures. Don't always fight at 100% while your enemy is "down to 70%, low on morale and fuel". You certainly will not find it that way on the next battlefield.

There is one controlling truth from all past wars which applies with equal weight to any war of tomorrow. No nation on earth possesses such limitless resources that it can maintain itself in a state of perfect readiness to engage in war immediately and decisively and win a total victory soon after the outbreak without destroying its own economy, pauperizing its own people, and promoting interior disorder.²³

We are and must continue to teach our officers that their forces will be austere, that they will be outnumbered by the enemy and above all that they must win. To do this, the tactician must out-think and out-wit his enemy; he must know his units like the "back of his hand," make the best possible utilization of the terrain, understand his enemy and find the enemy's weak points.

History plays a significant part in the tactics curriculum at Fort Leavenworth. General Stonewall Jackson's Valley campaign is an exceptionally good example of a leader, who by his courage, imagination, knowledge of the terrain and capabilities of his units continually out fought a greatly numerical force. The United States Army/Marine contingency force operations in Lebanon, Dominican Republic and other alerts serve as excellent examples worthy of continued study by the student. An entire sixty eight hour block is devoted to the study of the training, alerting, deploying and tactically employing a corps contingency force. From this base, combined arms operations of the division, brigade and battalion are studied.

The instructor must be quick to identify the student who wants to give every tactical situation the "general broad brush treatment." This student must be required to address and rationalize time and space factors on the battlefield, correctly show his appreciation of the terrain and weapons effects. Feedback to the student is essential and he is evaluated on his meaningful contribution, detailness of his responses and ability to grasp the situation, read it out and determine what needs to be done. "If the student is to get the full benefit from his solutions there has to be some way of pointing out to him not only his errors but their relative seriousness."²⁴

One of the most effective ways of showing a student his errors of fact or omission, while at the same time putting his ideas into conflict with others, is in the terrain model war

games. This is a combat simulation being used very effectively at the College and received with great enthusiasm by the students. Regardless of level, platoon, company, battalion or higher, the student is placed in the role of an enemy commander who develops his attack (or defense) plans, while his classmate develops his plan of defense (or attack). The players then place their units on a terrain model to begin the "battle." Throughout the exercise it is easy to see how each "reads" and understands terrain in relation to the mission his unit received. When units gain line-of-sight, direct fire engagements can be played. Using a dice and probability tables, hits and misses are determined. Play can be stopped at any time, by the instructor-controller, to discuss positioning of units, use of terrain, failures, etc. Arguments and disagreements ensue and changed behavior takes place. After introducing the war game this year, the demand from the students was "we want more time." Certainly, this war games training is not a new thing, but is a revitalizing of old teaching methods.

Decision making under the pressures of time are a reality in the tactics curriculum. Time sensitive execution requirement are given to the student through audio tapes, the student is required to reevaluate the situation, determine the actions to take, and issue a fragmentary order to his subordinates-- all under the pressure of time and subsequently evaluated by his peers and the instructor. Situations which require no decision are presented in order to assess the students'

on tactical matters. The unexpected is injected by the instructor at every opportunity because this is truly the flavor of battle.

Tactical instruction includes a separate introduction lesson on the Soviet Soldier, his organizations, from army to company level, and the employment of those forces in offensive/defensive scenario. Soviet/Warsaw Pact equipment from tanks to air defense are studied and applied in all tactics instruction. Frequently a student plays the role of the Soviet commander, organizes his forces and employs them against a US commander.

Tactical terrain walks are used in the curriculum to organize a brigade defensive sector. Weapons positions are selected, while routes into and out of the defensive sector are reconnoitered. This old, but effective method of learning about how to use the terrain, is very popular with the students and nets many teaching points. These terrain walks, coupled with low level aerial reconnaissance, continue to reinforce the value of terrain. Using this terrain walk as a base line to develop a detail brigade defensive plan, which is later war gamed on a terrain model, makes tactics an exciting and challenging subject.

In order to add realism to the instruction, frequent trips are made to units in the field to see "first hand" training exercises, staffs in operation and identify problem areas which students may elect to research as their special study effort while at the Command and General Staff College.

A recent trip to observe XVIII A&M Corps CPX, Caber Warrior by a group of students, resulted in an hour TV tape, student produced, being presented to the class. This CPX closely parallels the College scenario Contingency Force Operations. These type visits and subsequent reports are continued throughout the year.

Things have changed and the student is working harder in his effort to become a tactician. The curriculum is varied and interesting. A lot remains to be done and many of the techniques used are being shared with units in the field and other service schools. Smaller instructional groups, "real" scenario's, historical examples, terrain board war games and increased intellectual challenge has changed the tactics curriculum at the Command and General Staff College. We must continue to make tactics the imaginative, interesting and challenging subject that it is.

CONCLUSIONS

This examination of the techniques used at the Command and General Staff College to teach tactics, in the past and present, shows that the axiom "there is nothing new under the sun" applies. Many methods used in the past are being reapplied today with emphasis on the modern battlefield and weapons technology.

We are finding that learning tactics is an enjoyable and exciting experience. The student, being trained in peacetime, is better prepared to face the challenges of a dynamic battlefield. His mind is clear from "laundry list," checklist and the school solution. He will see units, in the field, that bear some similarity with those taught in the tactics curriculum.

Teaching tactics is a challenging and rewarding experience for faculty members. In the past two years there has been an increasing number of student officers who request assignment, upon graduation to the Department of Tactics. Our tactics instructors are highly qualified, willing and able to share their experiences and just as important to become effective and critical discussion leaders.



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FOOTNOTES

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